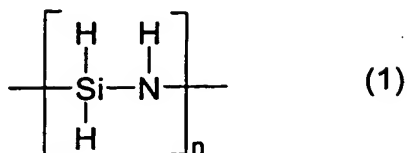


Claims

1. A coating for surfaces, comprising at least one perhydropolysilazane of the formula 1

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where n is an integer and is such that the perhydropolysilazane has a number-average molecular weight of from 150 to 150 000 g/mol, a solvent and a catalyst and, if desired, one or more cobinders.

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2. The coating as claimed in claim 1, wherein at least one cobinder is an organopolysilazane of the formula 2

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where R', R'' and R''' can be identical or different and are each either hydrogen or unsubstituted or substituted organic radicals, with the proviso that R', R'' and R''' must not simultaneously be hydrogen, and where n is such that the organopolysilazane has a number-average molecular weight of from 150 to 150 000 g/mol, with the proviso that the mass fraction of the organopolysilazane, based on the perhydropolysilazane, is at least 1% and not more than 100%, preferably 10% to 70%, more preferably 15% to 50%.

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3. The coating as claimed in claim 1 or 2, wherein said coating comprises a cobinder such as is customarily used for producing coating materials, with the proviso that the mass fraction of the cobinder, based on the perhydropolysilazane, is at least 1% and not more than 100%, preferably 10% to 70%, more preferably 20% to 50%.

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4. The coating as claimed in claim 3, wherein the cobinder is a cellulose derivative, a polyester or modified polyester, a phenolic or melamine resin, an

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acrylate, epoxide or polyisocyanate.

- 5 5. The coating as claimed in at least one of the preceding claims, wherein said coating contains 1% to 40% by weight of a perhydropolysilazane of the formula (I), preferably 5% to 30% by weight, more preferably 10% to 20% by weight.
6. The coating as claimed in at least one of the preceding claims, wherein said coating contains 0.001% to 5% by weight of a catalyst.
- 10 7. The coating as claimed in claim 6, wherein the catalyst is an N-heterocyclic compound, a mono-, di- or trialkylamine, an organic or inorganic acid, a peroxide, a metal carboxylate, an acetylacetonate complex or a metal powder or an organometallic compound.
- 15 8. The use of a coating as claimed in at least one of claims 1 to 7 as a protective coating for surfaces.
9. The use as claimed in claim 8, wherein the surfaces are metal or polymer surfaces.
- 20 10. The use as claimed in claim 8 or 9, wherein the cured coating has a thickness of at least 1 micrometer, preferably 2 to 20 micrometers, more preferably 3 to 10 micrometers.
- 25 11. The use as claimed in at least one of claims 8 to 10, wherein the protective coating is on wheel rims, especially aluminum rims.
- 30 12. A process for producing a protective coating on metal or plastic surfaces which may have already been coated, which comprises applying a coating as claimed in at least one of claims 1 to 7 to the surface and then curing it at a temperature of from 10 to 200°C, preferably at 25 to 160°C, more preferably at 80 to 150°C.